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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/865,184	05/24/2001	John F. Breedis	102134-100	2996
27267	7590	05/17/2004	EXAMINER	
WIGGIN AND DANA LLP ATTENTION: PATENT DOCKETING ONE CENTURY TOWER, P.O. BOX 1832 NEW HAVEN, CT 06508-1832			IP, SIKYIN	
			ART UNIT	PAPER NUMBER
			1742	

DATE MAILED: 05/17/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/865,184

Applicant(s)

BREEDIS ET AL.

Examiner

Sikyin Ip

Art Unit

1742

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 February 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 103

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-11 are rejected under 35 U.S.C. § 103 as being unpatentable over USP 4605532 to Knorr et al (PTO-1449, abstract, example 1, and Table 1B), JP 11-264037 (PTO-1449, abstract and Table 1, samples 1-8) or JP 61266540 (abstract and Table 1 in page 2).

The cited reference(s) disclose(s) the features including the claimed Cu base alloy composition, electrical conductivity, and/or tensile/hardness properties. The difference between the reference(s) and the claims are as follows: cited references do not disclose the resistance to stress relaxation at elevated temperature superior to

copper alloy C19500. However, since the alloys of cited references have alloy composition and tensile property at an ambient temperature overlap the claimed alloy, it is believed that said property would be overlapped. Therefore, the burden is on the applicant to prove that the product of the prior art does not necessarily or inherently possess characteristics attributed to the claimed product. In re Spade, 911 F.2d 705, 708, 15 USPQ2d 1655, 1658 (Fed. Cir. 1990) and In re Best, 195 USPQ, 430 and MPEP § 2112.01.

“Where the claimed and prior art products are identical or substantially identical in structure or composition, or are produced by identical or substantially identical processes, a prima facie case of either anticipation or obviousness has been established, In re Best, 195 USPQ 430, 433 (CCPA 1977).”

“When the PTO shows a sound basis for believing that the products of the applicant and the prior art are the same, the applicant has the burden of showing that they are not.” In re Spada, 15 USPQ2d 1655, 1658 (Fed. Cir. 1990).

Therefore, the prima facie case can be rebutted by evidence showing that the prior art products do not necessarily possess the characteristics of the claimed product. In re Best, 195 USPQ 430, 433 (CCPA 1977).”

The Sn content of Knorr is lower than the claimed value. But, it is well settled that a prima facie case of obviousness would exist where the claimed ranges and prior art do not overlap but are close enough that one ordinary skilled in the art would have expected them to have the same properties, In re Titanium Metals Corporation of America v. Banner, 227 USPQ 773 (Fed. Cir. 1985), In re Woodruff, 16 USPQ 2d 1934, In re Hoch, 428 F.2d 1341, 166 USPQ 406 (CCPA 1970), and In re Payne 606 F.2d

303, 203 USPQ 245 (CCPA 1979). To overcome the prima facie case, an applicant must show that there are substantial, actual differences between the properties of the claimed compound and the prior art compound. Hoch, 428 F.2d 1343-44, 166 USPQ 406 at 409.

JP 11-264037 in the Table discloses tensile strength instead of yield strength, but yield strength is about 90% of tensile strength which is within the claimed range.

The hardness value disclosed by JP 61266540 is proportional to yield strength. Thus, the improvement of hardness value means improvement of yield strength.

Claims 1-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 11-264037 (PTO-1449, abstract and Table 1, samples 1-8) or JP 61266540 (abstract and Table 1 in page 2) references as applied to claims above, and further in view of USP 4605532 to Knorr et al (PTO-1449, abstract and all Tables).

The claimed subject matter as is disclosed and rejected above by the cited reference(s) except for temper with a relief anneal, both yield strength and electrical conductivity. However, Knorr in Example 1 discloses temper with relief anneal is known in the art of cited references and Tables of Knorr teach that the Cu base alloys of cited references could obtain the claimed yield strength and electrical conductivity in the same field of endeavor. As is shown in Table 1B, that the alloy temper relief anneal or not would have the electrical conductivity and tensile strength in the claimed range. Therefore, it is well settled that a composition which is old has been treated by an old and well known method is unpatentable over the prior art composition in the untreated state. In re Beck, et al., 69 USPQ 520.

Response to Arguments

Applicant's arguments filed February 11, 2004 have been fully considered but they are not persuasive.

Applicants' argument as set forth in page 5 of instant remarks, last paragraph is noted. But, applicants fail to substantiate their position by way of factual evidence and declaration. Mere argument or conclusory statements in the specification is not sufficient. *In re Geisler* (CA FC) 43 USPQ2d 1362 (7/7/1997). Unexpected results have not been shown by the instant specification because which fail to compare the claimed subject matter with the closest prior art. *In re Burckel*, 201 USPQ 67, *In re Baxter Travenol Labs.*, 952 F.2d 388, 392, 21 USPQ2d 1281, 1285 (Fed. Cir. 1991), and *In re De Blauwe*, 736 F.2d 699, 705, 222 USPQ 191, 196 (Fed. Cir. 1984). Comparison must be done under identical condition except for the novel features of the invention. *In re Brown*, 173 USPQ 685 and *In re Chapman*, 148 USPQ 711. The showing of unexpected results must be occurred over the entire claimed range. *In re Clemens*, 622 F.2d 1029, 206 USPQ 289, 296 (CCPA 1980). The scope of the showing must be commensurate with the scope of the claims. *In re Tiffin*, 448 F.2d 791, 792 (Fed. Cir. 1971), *In re Coleman*, 205 USPQ 1172, *In re Grasselli*, 713 F.2d 731, 743, 218 USPQ 769, 778 (Fed. Cir. 1983), and *In re Greenfield*, 197 USPQ 227.

Applicants argue that the alloy of Knorr or JP '540 does not contain Zn. But, the claimed Zn reads on zero which suggests Zn could be eliminated from instant claims. Moreover, Knorr in col. 2, lines 1-9 discloses small amount of Zn is known to improve alloy properties.

Applicants argue that the Sn content (up to about 0.5 wt.%) of Knorr is outside the claimed 0.6 to 1.4 wt.% Sn. However, it is well settled that a prima facie case of obviousness would exist where the claimed ranges and prior art do not overlap but are close enough that one ordinary skilled in the art would have expected them to have the

same properties, *In re Titanium Metals Corporation of America v. Banner*, 227 USPQ 773 (Fed. Cir. 1985), *In re Woodruff*, 16 USPQ 2d 1934, *In re Hoch*, 428 F.2d 1341, 166 USPQ 406 (CCPA 1970), and *In re Payne* 606 F.2d 303, 203 USPQ 245 (CCPA 1979). To overcome the prima facie case, an applicant must show that there are substantial, actual differences between the properties of the claimed compound and the prior art compound. *Hoch*, 428 F.2d 1343-44, 166 USPQ 406 at 409. But applicants have never provided any factual evidence that the difference of Sn content would have different properties.

Applicants argue that JP '037 and JP '540 do not disclose the claimed temper relief annealing. But, applicants have not shown the properties of cited references outside the claimed range because of missing said step. The invention defined in a product-by-process claim is a product, not a process. *In re Bridgeford*, 357 F. 2d 679, 149 USPQ 55 (CCPA 1966) and MPEP § 2113.

Applicants' argument as set forth in paragraph bridging pages 7-8 of instant remarks is noted. But, as set forth in the response two paragraphs above that applicants fail to show the difference in Sn would cause tensile and electrical conductivity different. Moreover, Knorr in Table 1B has shown the temper relief anneal does not affect electrical conductivity and/or tensile strength in claimed range. The claimed electrical conductivity and/or tensile strength, temper relief anneal, and alloy composition are overlapped by the teaching of Knorr as set forth in the rejection. Therefore, it is applicants' burden to show the claimed stress relaxation resistance would not have been inherently possessed by the alloy of Knorr. "When the PTO shows

a sound basis for believing that the products of the applicant and the prior art are the same, the applicant has the burden of showing that they are not.” In re Spada, 15 USPQ2d 1655, 1658 (Fed. Cir. 1990).

Applicants’ argue that the examples of JP ‘037 do not contain Ni. However, it is well settled that the examples of the cited reference are given by way of illustration and not by way of limitation. In re Boe, 148 USPQ 507 (CCPA 1966) and In re Snow, 176 USPQ 328.

Applicants’ argument as set forth in page 9, first and second full paragraphs of instant remarks is noted. But, the examples of instant Table all have different compositions so it cannot reasonable to conclude Co has detrimental effect. It is well settled that comparison must be done under identical condition except for the novel features of the invention. In re Brown, 173 USPQ 685 and In re Chapman, 148 USPQ 711.

Applicants’ statement in page 9, third full paragraph of instant remarks is noted. But, the alloys of both references are in the same alloy class and application.

Applicants’ argument with respect to the relief anneal temper is noted. But, it is unclear that said relief anneal temper step is the sole step to contribute the claimed properties. Comparison must be done under identical condition except for the novel features of the invention. In re Brown, 173 USPQ 685 and In re Chapman, 148 USPQ 711. The showing of unexpected results must be occurred over the entire claimed range. In re Clemens, 622 F.2d 1029, 206 USPQ 289, 296 (CCPA 1980). The scope of the showing must be commensurate with the scope of the claims. In re Tiffin, 448 F.2d 791, 792 (Fed. Cir. 1971), In re Coleman, 205 USPQ 1172, In re Grasselli, 713 F.2d

731, 743, 218 USPQ 769, 778 (Fed. Cir. 1983), and In re Greenfield, 197 USPQ 227.

It is apparent that the claimed electrical conductive and tensile strength are possessed by alloys of cited references.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

The above rejection relies on the reference(s) for all the teachings expressed in the text(s) of the references and/or one of ordinary skill in the metallurgical art would have reasonably understood or implied from the text(s) of the reference(s). To emphasize certain aspect(s) of the prior art, only specific portion(s) of the text(s) have been pointed out. Each reference as a whole should be reviewed in responding to the rejection, since other sections of the same reference and/or various combination of the cited references may be relied on in future rejection(s) in view of amendment(s).

All recited limitations in the instant claims have been met by the rejections as set forth above.

Applicant is reminded that when amendment and/or revision is required, applicant should therefore specifically point out the support for any amendments made to the disclosure. See 37 C.F.R. § 1.121.

Art Unit: 1742

Examiner Correspondence

Any inquiry concerning this communication or earlier communications from the examiner should be directed to S. Ip whose telephone number is (571) 272-1241. The examiner can normally be reached on Monday to Friday from 5:30 A.M. to 2:00 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dr. Roy V. King, can be reached on (571)-272-1244.

The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



SIKYIN IP
PRIMARY EXAMINER
ART UNIT 1742

S. Ip
May 13, 2004